REMARKS

The following remarks, taken together with the claim amendments listed herein, are provided in response to the final Office Action communication dated July 10, 2008, the shortened period for response being extended to November 10, 2008, by a request for one-month extension of time being made herewith. The Response is being filed together with a Request for Continued Examination (RCE).

Claims 1-17 are pending. Claims 1-3 and 9-16 are rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent Application Publication No. 2006/0059107 (Elmore) and U.S. Patent Application Publication No. 2004/0039964 (Russell). Claims 4-8 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Elmore in combination with Russell and U.S. Patent Application Publication No. 2004/0230559 (Newman). Claim 11 is also objected to due to certain informalities. Claims 1, 11 and 17 are independent, and have been amended hereby.

Objection to the Claims

Claim 11 is objected to due to certain informalities. By way of this Response, claim 11 has been amended to attend to the informalities. In light of the foregoing amendment, Applicant respectfully requests that the objection to claim 11 be withdrawn.

Rejection of Applicant's Claims under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-3 and 9-16 under 35 U.S.C. § 103(a) as being obvious in view of Elmore in combination with Russell.

Applicant's amended claims 1 and 17 recite a method, while amended claim 11 recites a data structure implemented by the method of amended claim 1. Each of amended claims 1, 11 and 17 recite providing a data set structure which implements an abstract interface for use in both the business layer and the presentation layer, said data set structure comprising hierarchical organizational information for arranging data and functions into at least one tree structure, the tree structure being configured to store data and functions of arbitrary type; populating a business layer data set in said business layer according to said data set structure, said business layer data

set comprising data and functions available for use in said business layer; instantiating the business layer data set in said business layer as beans; serializing the beans into XML; transporting the serialized beans to the presentation layer using the Simple Object Access Protocol (SOAP); deserializing the serialized beans in the presentation layer; and populating a presentation layer data set in said presentation layer according to said data set structure from said business layer data set encoded as beans, said presentation layer data set comprising data and functions available for use by the user in said presentation layer.

The data set structure of Applicant's claimed invention provides a uniform code interface for access to data items and function items, which ultimately store data structures and functions, respectively. Data sets are defined and accessed in both the business layer and the presentation layer to provide a uniform interface for functions and data, regardless of the type of data structure and function.

Elmore does not describe such a data set structure. The Examiner cited paragraphs [0094], [0514]-[0516] and FIG. 18 as defining a data set structure which implements an abstract interface comprising hierarchical organization information for arranging objects into a hierarchy, the tree structure being navigable without regard to the type of data or function being stored. In the cited portions of Elmore, billing points and products that a user procures are organized into a hierarchy. There are three types of objects in the hierarchy: a root, a billing point and an assigned product. This hierarchy is a hierarchy of objects of specific types which do not implement an abstract interface, and cannot store data and functions of arbitrary type. The hierarchy object can be sub-classed, but not manipulated to store trees of objects of arbitrary type, only objects of type root, billing point or assigned product.

In addition, although the business layer of Elmore is composed of smart components implemented as beans, there is no disclosure or suggestion in Elmore that these beans employ the SOAP transport protocol. In fact, the only protocols mentioned in Elmore for transport adapters are IIOP or DCOM.

Russell does not cure the deficiencies of Elmore. Russell, when taken alone, or in combination with Elmore, fails to teach, suggest or render obvious all of the claimed features of the present application. Elmore describes serializing user-described objects. (See Russell at paragraph [0057]). Russell does not describe, however, a data set structure comprising

hierarchical organizational information for arranging data and functions into at least one tree structure, the tree structure being configured to store data and functions of arbitrary type. Russell describes objects and data types, but not a data set structure comprising hierarchical organizational information for arranging data and functions into at least one tree structure, the tree structure being configured to store data and functions of arbitrary type, as claimed in the present application.

In view of the foregoing, Applicant submits that Elmore and Russell, either taken alone, or in combination, do not teach, suggest or render obvious the claimed inventions of amended claims 1, 11 and 17. Additionally, each of claims 2, 3, 9 and 10 ultimately depend from claim 1, and each of claims 12-16 ultimately depend from claim 11. Since amended claims 1 and 11 have been shown to be patentable, each of the aforementioned dependent claims are also patentable. Accordingly, Applicant respectfully requests that the rejections of claims 1-3 and 9-16 asserted under 35 U.S.C. 103(a) be withdrawn.

Claims 4-8 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Elmore in combination with Russell and Newman.

Newman describes an information processing system which includes a multi-layer architecture between a data store and a user interface. Newman, however, fails to correct the deficiencies of Elmore and Russell.

Newman, when taken alone or in combination with Elmore and Russell, fails to teach, suggest or render obvious a data set structure comprising hierarchical organizational information for arranging data and functions into at least one tree structure, the tree structure being configured to store data and functions of arbitrary type, as recited by claims 1, 11 and 17 of the present application. Newman merely describes the types of objects that are recognized in the business layer for use with OQL, and domain does not specify the types. Domains in the sense of Newman are defined as objects that serve as an interface between business objects of the business layer and a data store. The domain objects do not serve to act as representatives of data types of objects.

In view of the foregoing, Applicant submits that Elmore, Russell and Newman, whether taken individually or in combination, fail to teach, suggest or render obvious each and every

limitation of amended claims 1, 11 and 17. Claims 4-8 ultimately depend from amended claim 1. Since amended claim 1 has been shown to be patentable, each of the aforementioned dependent claims are also patentable. Accordingly, Applicant respectfully requests that the rejections of claims 4-8 and 17 asserted under 35 U.S.C. 103(a) be withdrawn.

Conclusion

For at least the reasons set forth above, this patent application, as amended, is now in condition for allowance. Reconsideration and prompt allowance of this patent application are respectfully requested.

If it will advance the prosecution of this patent application, the Examiner is urged to telephone (973.597.2500) Applicant's undersigned representative. All written communications should continue to be sent to the address provided below.

Respectfully submitted,

Lowenstein Sandler PC
65 Livingston Avenue
Roseland, NJ 07068

Dated: November 10, 2008

By: / James Dobrow /
James Dobrow
Attorney for Applicant
Reg. No. 46,666